

Title (en)  
BIOFILTRATION WITH ENHANCED SLUDGE HANDLING

Title (de)  
BIOLOGISCHE FILTRATION MIT VERBESSERTER SCHLAMMHANDHABUNG

Title (fr)  
BIOFILTRATION AVEC MANIPULATION AMÉLIORÉE DE BOUES

Publication  
**EP 3071312 A4 20170719 (EN)**

Application  
**EP 14863143 A 20141120**

Priority  
• US 201361907142 P 20131121  
• US 201314087912 A 20131122  
• US 2014066647 W 20141120

Abstract (en)  
[origin: US2015136667A1] A water treatment system including a media filter having a filter chamber with a volume to accommodate filter media and a sludge outlet and a charge chamber for storing air. The charge chamber is fluidly connected to the filter chamber and has: (i) an air outlet for admitting air into the filter chamber; and (ii) an air inlet. The system also includes a trigger for selectively allowing the passage of air from the charge chamber air outlet into the filter chamber upon reaching a trigger release point and a sludge concentration/storage volume having at least one wall extending upward to form an upper opening. This wall has a height substantially above the trigger release point and substantially isolates the sludge volume from the charge chamber, except for the upper opening. Finally, an inlet to the sludge volume is at a height which allows pressure within the media filter during a filtration stage to move water above the wall height and into the sludge volume.

IPC 8 full level  
**B01D 24/24** (2006.01); **C02F 3/08** (2006.01)

CPC (source: EP US)  
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Citation (search report)  
• [ID] US 6517724 B1 20030211 - MALONE RONALD F [US]  
• See references of WO 2015077467A1

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**US 2015136667 A1 20150521**; **US 9227863 B2 20160105**; AU 2014352938 A1 20160609; AU 2014352938 B2 20170525; CA 2931228 A1 20150528; CA 2931228 C 20200630; DK 3071312 T3 20190506; EP 3071312 A1 20160928; EP 3071312 A4 20170719; EP 3071312 B1 20190220; EP 3071312 B8 20190522; US 10112855 B2 20181030; US 2016075578 A1 20160317; WO 2015077467 A1 20150528

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